

EXECUTIVE OFFICER SUMMARY REPORT
November 10, 2004

ITEM: 7

SUBJECT: NPDES PERMIT RENEWAL: WASTE DISCHARGE REQUIREMENTS FOR DUKE ENERGY SOUTH BAY, LLC, SOUTH BAY POWER PLANT, CHULA VISTA, SAN DIEGO COUNTY (TENTATIVE ORDER NO. R9-2004-0154, NPDES PERMIT NO. CA0001368) (Hashim Navrozali)

PURPOSE: To hold a public hearing and receive comments from interested parties regarding the tentative NPDES renewal permit for waste discharge requirements for the Duke Energy South Bay, LLC (Duke Energy), South Bay Power Plant (SBPP).

PUBLIC NOTICE: The NPDES permit hearing notice was published in the San Diego Union-Tribune on October 8, 2004 for the Regional Board meeting scheduled for November 10, 2004. Copies of the tentative Order were mailed on October 8, 2004 to the discharger and to all known interested parties and agencies. Copies were made available for public review at the Regional Board office on October 8, 2004. The tentative Order was also posted on the Regional Board's website on October 8, 2004.

These actions served as the 30-day official public notification for this action, as required by Title 40, Section 124.10 of the Code of Federal Regulations.

DISCUSSION: Tentative Order No. R9-2004-0154 (*Waste Discharge Requirements Duke Energy South Bay, LLC, South Bay Power Plant, San Diego County*) renews and updates NPDES Permit No. CA0001368 and supersedes the current NPDES permit, Order No. 96-05, in its entirety. The tentative Order includes waste discharge requirements for the combined discharge of up to 601.13 million gallons per day (MGD) of elevated temperature once-through cooling water and other waste discharges from SBPP to south San Diego Bay.

The initial version of tentative Order No. R9-2004-0154 was made available for public comment on June 25, 2004. During its regularly scheduled meeting on September 8, 2004, the Regional Board heard oral public testimony regarding the initial version of the tentative Order. Because staff was not able to fully address the large volume of written comments received on the tentative Order by the September 8, 2004 meeting date, the tentative Order was not

considered for adoption by the Regional Board. During the meeting the Regional Board directed staff to make additional modifications to tentative Order No. R9-2004-054 and bring the revised tentative Order back for the Regional Board's consideration at its November 10, 2004 meeting.

The modifications recommended by the Regional Board included reducing the time needed for SBPP to comply with the NPDES regulations related to appropriate point of discharge (requiring enforcement of all effluent limitations, including thermal limitations, at the SBPP property line) and the Clean Water Act (CWA) Section 316(b) *Phase II* rule. The Regional Board also concluded that it would be appropriate to provide Duke Energy additional time to comply with its new copper effluent limitations pursuant to the *California Toxics Rule* and *State Implementation Policy*. In addition, the Regional Board recommended that the tentative Order be modified to include specific findings that acknowledge the degradation of biotic communities residing in the SBPP discharge channel due to SBPP's discharge and the need for the discharger to take restoration measures. The Regional Board also directed its staff to remove requirements for a Special Sunset Study from the tentative Order.

All the modifications recommended by the Regional Board at its September 8, 2004 meeting have been incorporated into the revised version of the tentative Order.

The revised tentative Order also addresses, where appropriate, oral and written comments received by the public and resource agencies on the initial version of the tentative Order (i.e. the version of the tentative Order presented to the Regional Board at its September 8, 2004 meeting). The comment letters received regarding the initial version of the tentative Order are attached with this Agenda Mailing (see Supporting Documents 7 through 18).

Regional Board staff will be preparing a *Response to Comments* document to addresses written comments received regarding the initial and revised versions of the tentative Order and will be providing the document to Regional Board members in the Supplemental Agenda Mailing, prior to the November 10, 2004 hearing.

As of October 27, 2004, comment letters from the San Diego Bay Council and San Diego Gas and Electric (SDG&E) have been received on the revised tentative Order. Copies of these and any additional comment letters received regarding the revised tentative Order will be provided to Regional Board members in the Supplemental Agenda Mailing.

Based on the written comments received on the revised tentative Order, staff may have to make additional corrections and edits to the tentative Order. An Errata Sheet reflecting any changes to the revised tentative Order, Monitoring and Reporting Program, or Fact Sheet will be prepared and provided to Regional Board members in the Supplemental Agenda Mailing.

The waste discharge requirements (including effluent and receiving water limitations, prohibitions, and monitoring requirements) contained in the tentative Order are based on the federal NPDES regulations, the federal technological based standards for steam electric power plant (40 CFR 123), the provisions of CWA Sections 316(a) (thermal discharge regulations) and 316(b) (intake structures regulations), the State Thermal Plan, the Basin Plan, the *Policy for Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy, SIP), and the *California Toxics Rule* (CTR). The tentative Order also updates the waste discharge requirements in the NPDES permit to reflect the elimination of low volume and metal cleaning wastes from SBPP to San Diego Bay.

The tentative Order also incorporates where appropriate written comments provided by the public on the technical reports provided by Duke Energy on updated studies conducted at SBPP during 2003. The studies were conducted to assess the impact of the intake structures and the discharge from the SBPP on the biological resources and beneficial uses of south San Diego Bay and to verify compliance with CWA Sections 316(a) and 316(b).

All other effluent limitations, prohibitions, or monitoring requirements contained in the tentative Order are the same or more stringent than those in Order No. 96-05.

KEY ISSUES:

1. The revised tentative Order provides Duke Energy a three-year time schedule to comply with its new copper (total recoverable) effluent limitations. The initial version of the tentative Order required immediate compliance with copper limitations.
2. The revised tentative Order shortens the time allowed for Duke Energy to achieve compliance with the temperature effluent limitations at the SBPP property line from five years (as required in the initial version of the tentative Order) to three years.
3. The revised tentative Order shortens the time allowed for Duke Energy to complete a *Comprehensive Demonstration Study* (pursuant to the new CWA Section 316(b) *Phase II*

rule) from 42 months (as required in the initial version of the tentative Order) to 30 months.

See attached Staff Report (Supporting Document No. 2) dated October 28, 2004 for a detailed discussion of the revisions made to the initial version of the tentative Order based on the Regional Board's recommendations.

LEGAL CONCERNS: None.

SUPPORTING
DOCUMENTS:

1. Location map.
2. Staff Report dated October 28, 2004.
3. Revised Tentative Order No. R9-2004-0154 (including the Monitoring and Reporting Program).
4. Fact Sheet to Revised Tentative Order No. R9-2004-0154.
5. Copy of tentative Order transmittal letter, dated October 8, 2004.
6. Affidavit of Publication for newspaper public notice dated October 8, 2004.
7. Copy of San Diego Bay Council's comment letter, dated August 18, 2004.
8. Copy of Duke Energy's comment letter, dated August 18, 2004.
9. Copy of City of San Diego Councilmember Donna Frye's comment letter, dated August 18, 2004.
10. Copy of U.S. EPA's comment letter, dated August 18, 2004.
11. Copy of Department of Fish and Game's comment letter, dated August 31, 2004.
12. Copy of National Marine Fisheries Service's comment letter, dated August 31, 2004.
13. Copy of California Lieutenant Governor, Cruz Bustamante's letter, dated August 11, 2004.
14. Copy of California Independent System Operator (ISO) comment letter, dated September 2, 2004
15. Copy of Utility Consumers' Action Network (UCAN) comment letter, dated September 3, 2004
16. Copy of Duke Energy South Bay LLC, 2nd comment letter, dated September 15, 2004
17. Copy of San Diego Bay Council, 2nd comment letter, received on September 15, 2004
18. Copy of U.S. EPA's, 2nd comment letter, dated September 29, 2004

COMPLIANCE
RECORD:

On January 30, 2002 the average daily Delta T (incremental temperature of discharge above that of ambient receiving water) for SBPP exceeded

the permitted value of 15 degrees F, by 0.3 degrees F. This constituted a violation of Order No. 96-05. The discharger indicated that the Delta T exceedance was a random occurrence and that the operators at the power plant would be more vigilant in the future. A staff enforcement letter was subsequently issued to Duke Energy on March 26, 2004, noting the violation. No further enforcement action was taken regarding this violation.

No additional effluent limitation violations of Order No. 96-05 have been noted in the last five years.

**SIGNIFICANT
CHANGES:**

See attached Staff Report (Supporting Document No. 2) dated October 28, 2004 for a summary of significant changes and new requirements that have incorporated into tentative Order No. R9-2004-0154, with respect to the current NPDES permit (i.e. Order No. 96-05):

RECOMMENDATION:

Adopt tentative Order No. R9-2004-0154.